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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,456

11/10/2005

Takahiro Kitahara

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EXAMINER

JACOBSON, MICHELE LYNN

ART UNIT

PAPER NUMBER

1794

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/556,456	Applicant(s) KITAHARA ET AL.	
	Examiner MICHELE JACOBSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

2. Claim 14 is objected to because of the following informalities: Claim 14 recites the limitation “wherein the temperature [Tx] required for 1% by mass of the chlorotrifluoroethylene copolymer subjected to heating testing to be decomposed is not lower than 380° C”. In order to be more grammatically and idiomatically correct the examiner suggests this limitation should read: “wherein the temperature [Tx] required for 1% by mass of the chlorotrifluoroethylene copolymer to be decomposed by heat testing is not lower than 380° C. Appropriate correction is required.

Claim Rejections - 35 USC § 102 / 103

3. Claims 1-3 and 7-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fukushi et al. (US 2003/0198770).

4. Fukushi et al. teach an article that may be used as a hose for conveying fuels (paragraph 0001). The article comprises a layer of a perhalogenated polymer (paragraph 0004). Additional layers comprising polymers, such as polyamides and

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polyolefins, may be used (paragraph 0037-0041). The perhalogenated polymer may comprise at least 95% of interpolymerized units, such as tetrafluoroethylene and chlorotrifluoroethylene, and further include other perfluorinated monomers (paragraph 0015). Additional perfluorinated monomers recited include hexafluoropropylene (HFP) (Para. 0023) and perfluoroalkyl vinyl ethers (PAVE) such as perfluoro(propyl vinyl ether) (PPVE) (Para. 0023). A polymer comprising at least 95% TFE and CTFE would be expected to have a fuel permeation coefficient that meets the limitations of claims 1-3 since such a polymer reads on the material described in the instant specification (see page 10, lines 5-13). Moreover, because the thickness of the perhalogenated layer (0.5 mm in the Examples) is within the range cited in the instant specification (see page 23, lines 23-27), the resulting fuel hose would be expected to have a fuel permeation rate that meets the limitation of claims 1-3.

5. While Fukushima et al. do not illustrate a specific embodiment wherein a copolymer of CTFE, TFE, and a comonomer is used as the perhalogenated polymer, Fukushima et al. do teach that the perhalogenated polymer may comprise 95% of interpolymerized units such as TFE and CTFE in addition to other perfluorinated monomers (see paragraph 0015). One of ordinary skill in the art would have immediately envisaged that the additional perfluorinated monomers present in an amount of 5% or less could in separate embodiments comprise HFP and PAVE. The recitation of a laminate comprising such a polymer anticipates the limitations of claims 9-13.

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6. Since Fukushi et al. recites the same polymer claimed by applicant, it is necessarily so that it would also display the same heat decomposition properties recited in claim 14.

7. In the event that one skilled in the art would not readily envisage a perhalogenated polymer comprising 95% of a combination of CTFE and TFE in addition to other perfluorinated monomers, it would have been obvious to one skilled in the art to use both CTFE and TFE in the perhalogenated polymer since it has been held that it is *prima facie* obvious to combine two compositions (e.g. monomers of CTFE and monomers of TFE) each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition (e.g. monomers of CTFE and TFE) to be used for the very same purpose. See MPEP 2144.06. The utilization of additional perfluorinated monomers such as HFP and PAVE as recited by Fukushi would have produced a laminate comprising the composition claimed in claims 9-12. Fukushi therefore either anticipates or obviates the limitations of claims 1-3 and 7-14.

Response to Arguments

8. Applicant's arguments filed 5/8/09 have been fully considered but they are not persuasive.

9. Applicant has asserted on page 5 of the remarks that "interpolymerized does not mean copolymerized". This is contrary to the widely known definition of interpolymer within the polymer arts which defines interpolymer to be synonymous with copolymer. (See Webster's Third New International Dictionary, Unabridged, (c) 1993) As such, the

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term "interpolymerize" is therefore synonymous with "copolymerize". Applicant has pointed to paragraph [0027] of Fukushi to assert that because the Fukushi recites that in one embodiment the polymer recited by Fukushi may comprise "interpolymerized units of Formula IV" that Fukushi intends "interpolymerized" to mean "contains repeating units derived from" and that in turn this does not mean "copolymerized with other specific units". While paragraph [0027] may not mention other specific units, it does specifically state the polymer recited **comprises** units of Formula IV meaning that other units may also be present. Fukushi clearly states the polymer recited may further include units derived from other perfluorinated monomers in various combinations. Therefore, the examiner is not persuaded.

10. Applicant asserts on page 6 that since Fukushi does not recite all of the possible monomers for the copolymer in the same paragraph, that Fukushi does not envision a copolymer comprising CTFE, TFE and an additional monomer. This is inaccurate since the paragraph referred to is intended to recite the preferred monomers. Additionally, there is no requirement in patent law that the embodiments of an invention disclosed in a reference must have all of their elements recited in the same paragraph.

11. Applicant asserts on page 6 of the arguments that because the examples of Fukushi do not disclose applicant's invention, that Fukushi does not anticipate applicant's invention. However, "nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims." In re Nehrenberg, 280 F.2d 161, 126 USPQ 383 (CCPA 1960).

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12. Applicant has asserted that the hose recited by Fukushi does not have "excellent liquid chemical impermeability without impairing bonding strength". This argument is not germane since applicant has not recited any claim limitations related to the bonding strength between the layers of the hose.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MICHELE JACOBSON** whose telephone number is (571)272-8905. The examiner can normally be reached on Monday-Thursday 8:30 AM-7 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michele L. Jacobson
Examiner /M. J./
Examiner, Art Unit 1794
Art Unit 1794

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794